## FERC Relicensing: Joint Meeting Kankakee Hydroelectric Project, FERC No. P-8632

May 3, 2023





## Agenda

- Attendance (Sign-In Sheet)
- Safety Moment
- Introductions
- Kankakee River & Surroundings
- Kankakee Hydroelectric Project
- Project Boundary, Photographs, Operations
- TLP & Key Milestone Dates
- Consultation to Date
- Preliminary 2023 Study Plans
- Existing Information, Project Impacts, Proposed PME Measures
- City of Kankakee FERC Relicensing Website
- Questions



## Safety Moment





- Take a boating safety course.
- Check equipment.
- Make a float plan.
- Wear a life jacket.
- Use an engine cut-off device.
- Watch the weather.
- Pay attention.
- Know where you're going.
- Travel at safe speeds.
- Never boat under the influence.
- · Keep in touch.



### Introductions

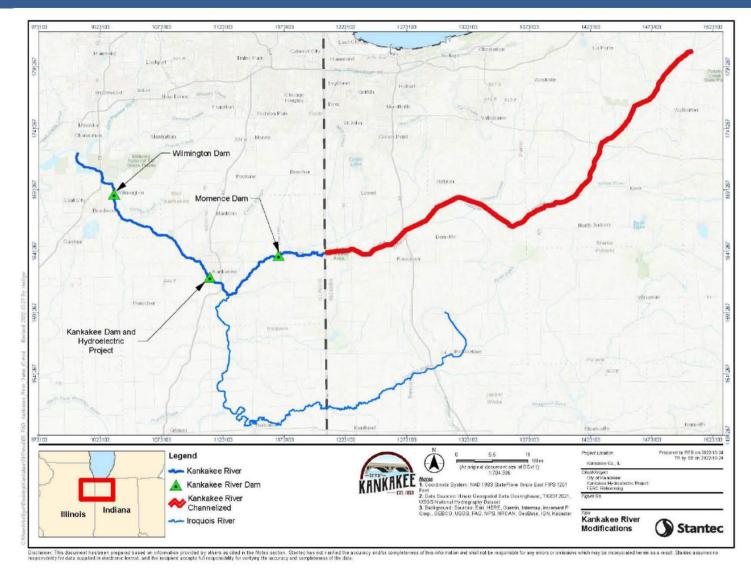
# City of Kankakee Zachary Newton – Manager of Sewer Services



Kirby Gilbert – Principal Hydropower Planner Steven Bedross – Sr. Environmental Planner, Chicago

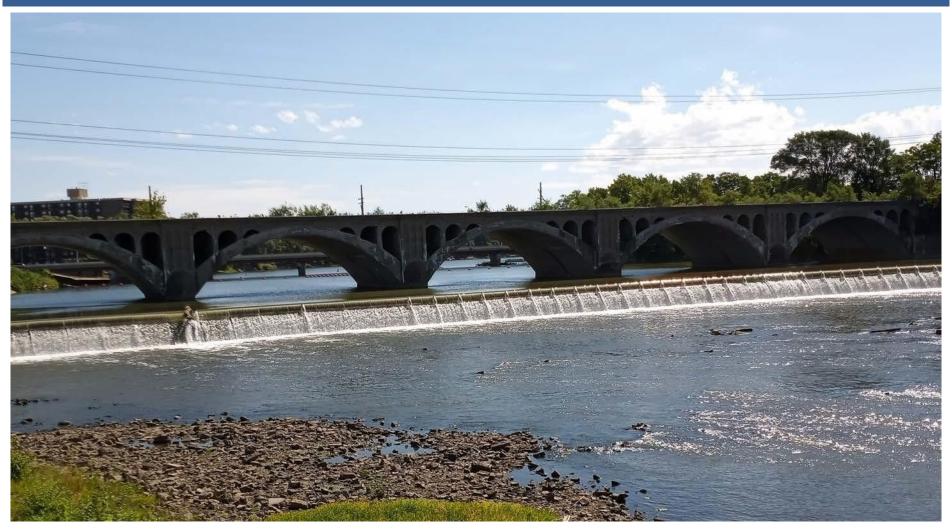


### **Kankakee River**





### Kankakee Dam





## Kankakee Hydroelectric Project History

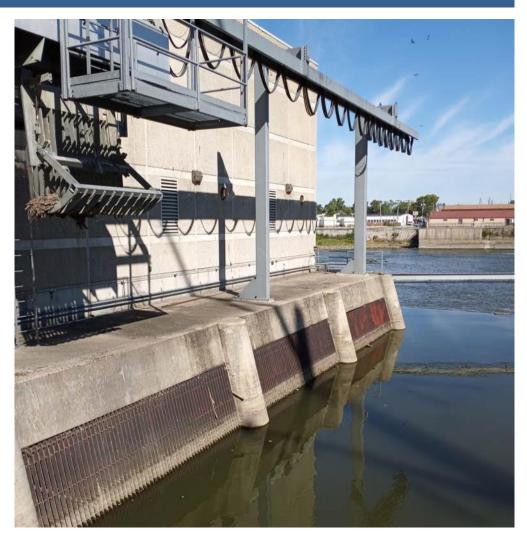


- FERC License Issued May 27, 1988
- Commercial
   Operation April 1991
- As-Built
   Transmission Line
   Amendment to
   FERC License 1993
- FERC License Expires April 30, 2028



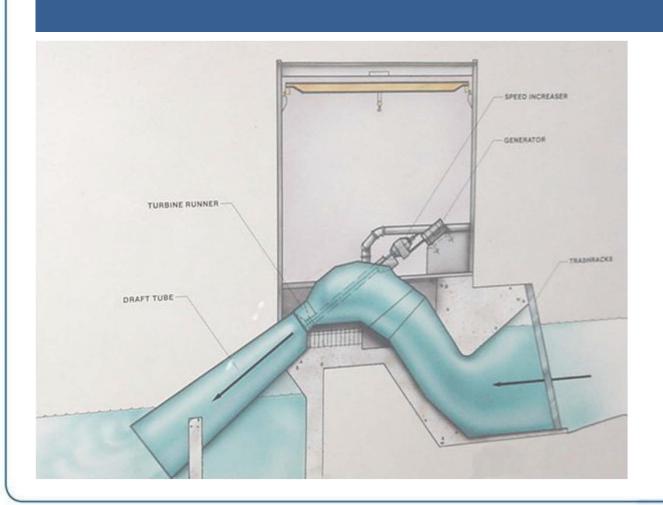
## Kankakee Hydroelectric Project Facilities

- Intake Channel approximately 100 feet long by 100 feet wide
- Concrete Powerhouse (103 feet long by 40 feet wide) with 3 Turbine/Generators (0.4 MW each)
- Tailrace Channel approximately 60 feet long by 85 feet wide
- Transformer adjacent to Powerhouse
- 2.4-Mile-Long, Single-Circuit 12.5 kV
   Transmission Line (1.5 Miles Buried [Including Bridge Xing in Conduit] and 0.9 Mile Overhead)



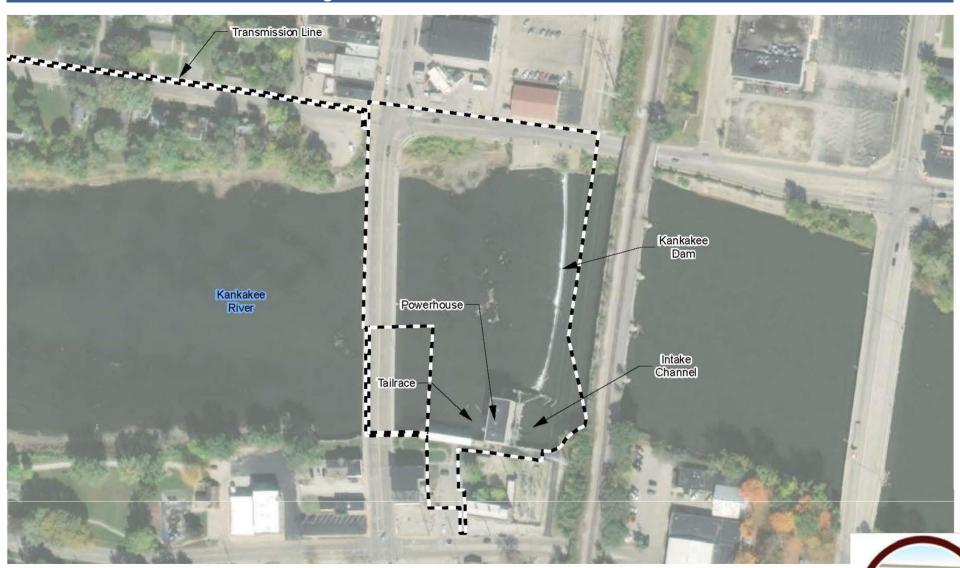


# Slant Axis, Semi-Kaplan Siphon Turbines with Speed Increasers "Hydrolux" Induction Generators

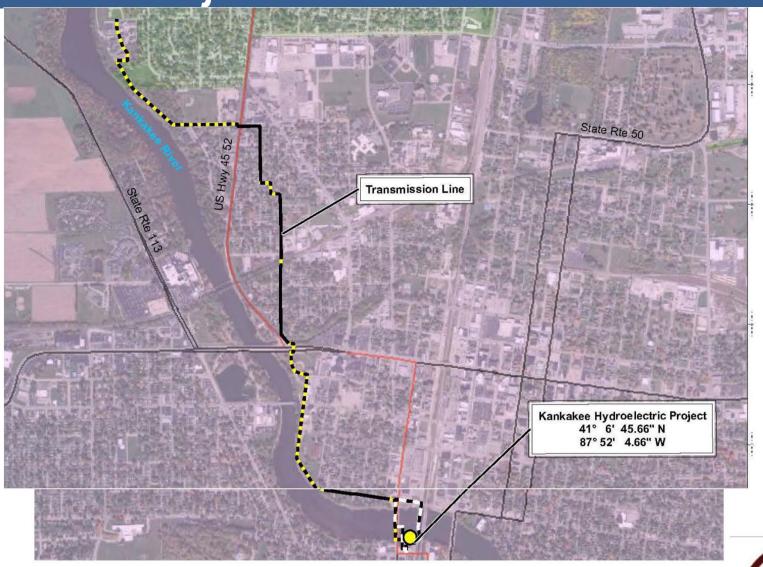


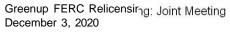
- 10-Foot Design Head
- 130 RPM (Speed Increaser Input); 720 RPM (Speed Increaser Output)
- Unit Hydraulic Capacity: 300 CFS Min; 2,000 CFS Max
- Turbines/Generators to be Repaired or Replaced in 2024-2025

# Kankakee Hydroelectric Project Project Boundaries



## Greenup Hydroelectric Project **Project Boundaries**





December 3, 2020

# Kankakee Hydroelectric Project Photographs



ComEd Substation Adjacent to Powerhouse Looking South



Powerhouse Entrance Road, Looking North



Powerhouse Intake Area Looking North



# Kankakee Hydroelectric Project Photographs



Project Fishing & Viewing Platform Looking North



Project Fishing & Viewing Platform, Looking Northwest



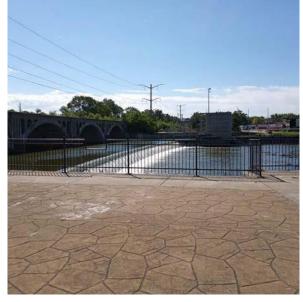
Project Fishing & Viewing Platform Looking East



# Kankakee Hydroelectric Project Photographs



South McMullen Drive Bridge (t-line attached in conduit) Looking Northwest



Transmission Line on West River Street near South 3<sup>rd</sup> Avenue Looking West

North Abutment of Kankakee Dam, Looking South



# Kankakee Hydroelectric Project Photographs



Transmission Line (on Right)
Looking North in Alley between 8<sup>th</sup>
Avenue and 9<sup>th</sup> Avenue



La Vasseur Park (T-Line runs Underground through Park)



# Kankakee Hydroelectric Project Operations

- Run-of-River Mode in Coordination with Illinois DNR (Existing FERC License Article 401).
- Licensee operates Inflatable Rubber Dam (24 Inches High When Fully Inflated) atop the Kankakee Dam. Rubber Dam allows Licensee to Vary the Surface Elevation of the Reservoir.
- Rubber Dam Fully Inflated During Normal Project Operation and a 500 CFS Min Flow (or Inflow, if Less) Maintained over Kankakee Dam (Existing License Article 402) to Protect Fishery Resources in the Kankakee River.
- Turbines/Generators to be Repaired or Replaced in 2024-2025.



# FERC Process – TLP & Key Milestones

- File Newspaper Notice of PAD Filing January 21, 2023
- File NOI, PAD,TLP Request & Non-Federal Representative Designation Request – January 27, 2023
- FERC Approves Use of TLP March 7, 2023
- Host Joint Agency Meetings & Site Visit May 3, 2023
- Stakeholder Comments on PAD & Study Requests July 1, 2023
- Prepare Final Study Plans 2023
- Complete Studies and Prepare Reports 2023/2024
- File DLA 2025
- Stakeholder Comments on DLA 2025
- File FLA and Section 401 (Water Quality Certification) Application 2026
- File Newspaper Notice of FLA Filing 2026
- FERC Processes FLA 2026/2027/2028
- FERC Issues New License 2028



## Kankakee Hydroelectric Project Consultation to Date

- Pre-PAD Questionnaire (September 2022) Sent to 9 Potential Stakeholders: USACE, USFWS, ACHP, IDNR Natural Heritage, IHPA, IDOT, IEPA, Kankakee Co Planning Dept, and KRMA
- 2 Responses: ACHP, IHPA
- PAD (January 27, 2023)
- Joint Meetings and Site Visit (May 3, 2023)

Federal E Kankakee preparing	of Kankakee, Illinois (City), is the Licensee of the F nergy Regulatory Commission (FERC) No. 863: County, Illinois (see attached map). The Lice a Pre-Application Document (PAD) that pre- elevant, and reasonably available information pe	2), loca ensee, ovides	ted along the Kankakee River in with assistance from Stantec, is FERC and other entities with
	nt FERC License for the Project expires on Ap its intent to file a new license application for the 1023.		
related into	C Relicensing PAD Information Questionnaire volume formation needs regarding relicensing of the Promation gathered for the PAD will be used through an analyzing the effects of FERC relicensing on the page of th	oject, a ghout t	and to develop preliminary study he relicensing process to prepare
informatio Question	nization has been identified as a possible soun n to be included in the PAD, the Licensee re- naire to the best of your ability. Please return the per (email: <u>rick.bolliger@stantec.com)</u> within 30 o	quests e comp	that you complete the following eleted Questionnaire to Stantec's
	s and/or questions regarding this Questionnaire k.bolliger@stantec.com; phone: 312-831-3070).		e sent to Stantec's Rick Bolliger
email. nc	122700000000000000000000000000000000000		
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# Existing Relicensing Information (See PAD)

- Kankakee County Soil Survey
- USGS Gage Flow Data and National Hydrography Dataset
- Kankakee River Yesterday and Today
- About the Kankakee River
- Kankakee Watershed Assessment for Water Supply
- Source Water Assessment: Aqua Illinois Kankakee
- TMDL for the Kankakee/Iroquois Watershed
- City of Kankakee Water Quality Monitoring Data (MS4)
- Kankakee River Fishery Fact Sheet
- Fishing the Kankakee and the Iroquois
- Kankakee River Basin Surveys (IDNR, IEPA, INHS)
- USFWS Information for Planning and Consultation (IPaC)
- Checklist of Illinois Endangered and Threatened Species
- Kankakee River Valley Forest Preserve District Site Locations
- Kankakee Valley Park District Parks and Facilities
- Illinois State Comprehensive Outdoor Recreation Plan
- Kankakee County Greenways and Trail Plan
- Kankakee River Water Trail Plan
- Kankakee Riverwalk Master Plan
- 2030 Kankakee County Comprehensive Plan
- Riverfront TIF Redevelopment Plan and Program
- National Land Cover Database
- National Historic District Evaluation Forms (State Hospital, Riverview, Downtown)
- Community Health Status Assessment: Kankakee County
- American Community Survey (US Census Bureau)



# Project Impacts (See PAD)

- Turbine-generator units currently out of service. Plan to put back into service 2024-2025.
- Continued ROR operations and minimum flow requirements minimize aquatic (and visual resource) impacts.
- Proposed overhead transmission line to Stone Street Wastewater Lift Station (600 feet through residential front yards).
- Lands within Project boundary are highly urbanized.
- Tree clearing in winter to avoid roosting bats.
- Continued O&M of Project tailrace fishing and viewing area.
- Continued compliance with IHPA (SHPO) Programmatic Agreement.
- Power used to offset electricity costs related to KRMA WWTP.



- Geology & Soils
- Water Quantity, Use & Quality
- Fisheries
- Mussels & Other Aquatic Species
- Wetlands, Riparian & Littoral Habitat
- RTE Species
- Recreation
- Land Use
- Historical, Archaeological, and Cultural Resources
- Tribal Resources
- Socioeconomic Resources

**Bold** = Proposed 2023 Study; *Italics* = Proposed After Project is Operational Again; For Others: Existing Information is Believed Adequate for FERC Relicensing



#### Recreation

- Facilities inventory & condition (including accessibility)
   assessment in summer 2023, along with stakeholder & agency
   interviews.
- Information collected above to inform recreation demand & need study in fall 2023.
- Issues (if any), along with plan for maintaining and operating the existing facility, will be addressed in a Recreation Management Plan to be prepared as part of FERC relicensing.
- Use monitoring and reporting (to be performed after repair or replacement of the turbines-generators) methods will also be included in this Recreation Management Plan.



#### Historical, Archaeological, & Cultural Resources

- FERC-required (Section 106) consultation with IL SHPO & other parties.
- Phase 1A (literature and records search) cultural resources survey in summer 2023 within Area of Potential Effect (APE, proposed as FERC Project boundary).
- Phase 1B (limited fieldwork) cultural resources survey in summer 2023, only if needed based on results of Phase 1A.
- Consult with IL SHPO and Tribes, as needed.



#### Socioeconomic Resources

- Table of racial, ethnic, and poverty statistics for state, county, and census block groups within the geographic scope of analysis (i.e., areas within one mile of the existing Project boundary), using information from the US Census Bureau's most recently available American Community Survey 5year Estimates.
- identify environmental justice populations by block group, using the data obtained above, by applying methods included in US EPA's Promising Practices for Environmental Justice (EJ) Methodologies in National Environmental Policy Act (NEPA) Reviews (2016).
- If needed, mitigation measures to avoid and/or minimize Project effects on environmental justice communities will be proposed
- Schools, hospitals, and other sensitive receptors in the geographic scope of analysis will be mapped and any Project-related effects on these receptors described.



## Proposed PMEs (See PAD)

- Consistent with Article 403 of the existing FERC license, the Licensee proposes to file an erosion control plan as it relates to construction activity at the project.
- Consistent with Article 401 of the existing FERC license, the Licensee proposes to operate the project in a run-of-river mode.
- Consistent with Article 402 of the existing FERC license, the Licensee proposes to release a minimum flow of 500 cfs, or inflow, whichever is less, from the project reservoir.
- Prepare and implement a Water Quality Monitoring Plan.
- City arborist will determine trees to be removed and replaced as part of the proposed Stone Street transmission line extension.
- The Licensee proposes to implement a bat protection measure (tree clearing along the existing and proposed transmission line route under the supervision of City arborist only during winter months to avoid potential impacts on roosting bats).
- Prepare and implement Recreation Management Plan.
- Consistent with Article 406 of the existing FERC license, the Licensee proposes to comply with the Programmatic Agreement entered with the State Historic Preservation Officer.



## Kankakee FERC Relicensing Public Website

+https://citykankakee-il.gov/departments/esu-dpw/notice-of-intent.php)



#### **Hydroelectric Plant FERC Relicensing**



Reminder: Written Comments on PAD and Study Requests
Due to **FERC** on or Before **June 1, 2023** 



## Kankakee FERC Relicensing

### **Questions & Comments?**



Zachary Newton – City of Kankakee Email: <u>zjnewton@citykankakee-il.gov</u>

Thank You! We Look Forward to Working with You...

